

What is claimed is:

1. A method for managing data organisation for computer programs, the method including the steps of:

5       generating and storing a reference taxonomy, the reference taxonomy comprising information defining a data organisation;

10       accessing storage associated with a computer program to obtain an application taxonomy, the application taxonomy comprising information defining the organisation of stored data items of the program;

      comparing the reference taxonomy with the application taxonomy to identify matching and non-matching features of the compared taxonomies; and

15       in response to a selection of a preferred taxonomy, storing the preferred taxonomy as a replacement of at least one of the reference taxonomy and the application taxonomy.

20       2. A method according to claim 1, wherein the step of storing a preferred taxonomy in response to a selection of the preferred taxonomy includes:

25       generating a modified reference taxonomy which aggregates features of the compared reference taxonomy and features of the compared application taxonomy, wherein an identified matching feature of the compared reference and application taxonomies is represented as a single node in the modified reference taxonomy.

30       3. A method according to claim 1, wherein the step of storing a preferred taxonomy in response to a selection of the preferred taxonomy includes:

      generating a modified application taxonomy which includes features of the compared reference taxonomy.

4. A method according to claim 3, wherein the generated reference taxonomy includes nodes representing data structures and information representing relationships between data structures, and wherein the step of generating a modified application taxonomy includes generating at least one new data structure within the modified application taxonomy which new data structure corresponds to a node of the compared reference taxonomy.

5. A method according to claim 3, wherein the generated reference taxonomy includes nodes representing data structures and information representing relationships between data structures, and wherein the step of generating a modified application taxonomy includes repositioning data structures within the compared application taxonomy, such that the relationships between the data structures of the modified application taxonomy and nodes of the reference taxonomy are more consistent than the relationships between data structures of the compared application taxonomy and nodes of the reference taxonomy.

6. A method according to claim 1, wherein the step of generating a reference taxonomy includes:  
accessing storage associated with a second computer program to obtain an application taxonomy for the second program.

7. A method according to claim 1, wherein a step of accessing storage to obtain an application taxonomy includes using an adapter which interfaces to the respective computer program to access information relating to the names of and relationships between stored data structures.

8. A method according to claim 1, wherein the step of generating a reference taxonomy includes:

receiving user inputs via a graphical user interface;  
and

5 interpreting user inputs to generate nodes  
representing data structures of a taxonomy and to generate  
information representing relationships between data  
structures.

10 9. A method according to claim 1, wherein the step of  
comparing includes comparing, using string matching,  
qualified node names for nodes of the reference taxonomy  
and nodes, corresponding to data structures, of the  
application taxonomy.

15 10. A method according to claim 1, wherein the step of  
comparing the reference taxonomy with the application  
taxonomy is repeated in response to a trigger condition.

20 11. A method according to claim 10, wherein the trigger  
condition is expiry of a predefined time period.

25 12. A method according to claim 1, wherein said step of  
generating a reference taxonomy is performed on a first  
data processing apparatus and is followed by a step of  
sending at least a part of the reference taxonomy to a  
second data processing apparatus, and wherein the steps of  
comparing and storing a selected preferred taxonomy are  
performed on the second data processing apparatus.

30 13. A method according to claim 12, wherein the step of  
sending at least a part of the reference taxonomy is

performed by a distributed publish/subscribe messaging system.

14. A method according to claim 1, including the steps of:  
5       generating, via a graphical user interface (GUI), a graphical representation of the reference taxonomy including nodes representing data structures of the taxonomy; and

10       in response to user-interactions with the GUI, generating calls to the computer program to initiate application program functions.

15. A method according to claim 14, wherein the GUI includes a data backup function call and the method  
15       includes the step of:

20       in response to user-selection of the data backup function call and user-selection of a set of one or more nodes of the reference taxonomy, sending a call to the application program to backup data within the application taxonomy data structures corresponding to said set of nodes.

16. A taxonomy manager for managing data organisation for computer programs, comprising:

25       means for generating and storing a reference taxonomy, the reference taxonomy comprising information defining a data organisation;

30       at least one adapter program for accessing storage associated with a respective computer program to obtain an application taxonomy, the application taxonomy comprising information defining the organisation of stored data items of the program;

means for comparing the reference taxonomy with the application taxonomy to identify matching and non-matching features of the compared taxonomies; and

means, responsive to a selection of a preferred taxonomy, for storing the preferred taxonomy as a replacement of at least one of the reference taxonomy and the application taxonomy.

17. A taxonomy manager according to claim 16, including a plurality of adapters, wherein each adapter enables accessing of storage associated with a computer program of a respective type and obtaining the application taxonomy for the computer program of the respective type.

18. A taxonomy manager according to claim 16, including a graphical user interface (GUI) for generating a graphical representation of the reference taxonomy, the graphical representation including nodes representing data structures.

19. A taxonomy manager according to claim 18, wherein the GUI is responsive to user inputs to identify selection of a preferred taxonomy.

20. A taxonomy manager according to claim 18, wherein the GUI includes function calls for initiating operations of said respective computer program.

21. A taxonomy manager according to claim 20, wherein the GUI includes a data backup function call and is responsive to user-selection of the data backup function call and user-selection of a set of one or more nodes of the reference taxonomy to send a call to the respective

computer program to backup data within the application taxonomy data structures corresponding to said set of nodes.

5       22. A taxonomy manager according to claim 16, including an  
adapter for interfacing between the means for generating a  
reference taxonomy and a publish/subscribe messaging  
manager to enable at least a part of the generated  
reference taxonomy to be sent to a second taxonomy manager  
10       via the publish/subscribe messaging manager.

23. A taxonomy manager according to claim 22, including a  
listener component for identifying receipt of reference  
taxonomy information and triggering the taxonomy manager to  
15       process such received taxonomy information.

24. A computer program for managing data organisation,  
comprising:

20       program code for generating and storing a reference  
taxonomy, the reference taxonomy comprising information  
defining a data organisation;

25       program code for accessing storage associated with a  
first computer program to obtain an application taxonomy,  
the application taxonomy comprising information defining  
the organisation of stored data items of the first program;

      program code for comparing the reference taxonomy with  
the application taxonomy to identify matching and  
non-matching features of the compared taxonomies; and

30       program code, responsive to a selection of a preferred  
taxonomy, for storing the preferred taxonomy as a  
replacement of at least one of the reference taxonomy and  
the application taxonomy.

25. A computer program according to claim 24, including a graphical user interface for displaying taxonomies to a user and for responding to user inputs to identify selection of a preferred taxonomy.

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26. A data processing apparatus including: a data processor; data storage; one or more computer programs for controlling the operation of the data processor to perform operations on data items stored in the data storage; and a taxonomy manager for managing organisation of stored data in association with the one or more computer programs, the taxonomy manager including:

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means for generating and storing a reference taxonomy, the reference taxonomy comprising information defining a data organisation;

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an adapter for accessing storage associated with a computer program to obtain an application taxonomy, the application taxonomy comprising information defining the organisation of stored data items of the program;

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means for comparing the reference taxonomy with the application taxonomy to identify matching and non-matching features of the compared taxonomies; and

means, responsive to a selection of a preferred taxonomy, for storing the preferred taxonomy as a replacement of at least one of the reference taxonomy and the application taxonomy.

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